

SHP (h): 293T Lysate: sc-114141

BACKGROUND

SHP (short heterodimer partner and small heterodimer partner) is an orphan nuclear receptor containing the dimerization and ligand-binding domains found in other nuclear receptors, but lacking the conserved DNA binding domain. SHP is specifically expressed in liver and other tissues, including fetal liver and adrenal gland, as well as adult spleen and small intestine. In addition, SHP is highly expressed in the murine macrophage cell line RAW 264.7 but suppressed by oxLDL and 13-HODE, which is a ligand for PPAR γ . SHP interacts with nuclear receptors, including thyroid receptor, retinoic acid receptors (RAR and RXR) and estrogen receptors (ER α and ER β). SHP functions as a negative regulator of these receptors by at least three mechanisms: inhibition of DNA binding via dimerization, direct antagonism of co-activator function through competition and possibly transrepression via recruitment of putative corepressors. In oxLDL (oxidized low density lipoprotein)-treated, resting macrophage cells, SHP acts as a transcription co-activator of NF κ B, suggesting that SHP is a modulatory component in the regulation of the transcriptional activities of NF κ B. Lastly, negative feedback regulation of a hepatic bile acid transporter, NTCP, is controlled by bile acid-activated FXR via induction of SHP to protect the hepatocyte from bile acid-mediated damage in cholestatic conditions.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: NROB2 (human) mapping to 1p36.11.

PRODUCT

SHP (h): 293T Lysate represents a lysate of human SHP transfected 293T cells and is provided as 100 μ g protein in 200 μ l SDS-PAGE buffer.

APPLICATIONS

SHP (h): 293T Lysate is suitable as a Western Blotting positive control for human reactive SHP antibodies. Recommended use: 10-20 μ l per lane.

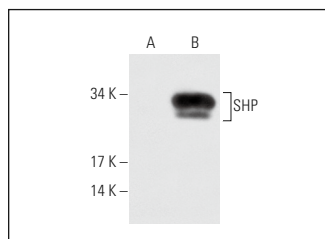
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

SHP (F-12): sc-271469 is recommended as a positive control antibody for Western Blot analysis of enhanced human SHP expression in SHP transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

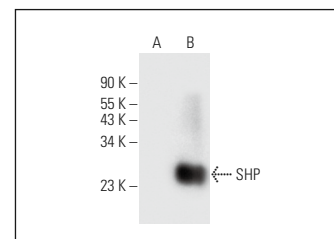
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:
1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

DATA



SHP (F-12): sc-271469. Western blot analysis of SHP expression in non-transfected: sc-117752 (A) and human SHP transfected: sc-114141 (B) 293T whole cell lysates.



SHP (H-5): sc-271511. Western blot analysis of SHP expression in non-transfected: sc-117752 (A) and human SHP transfected: sc-114141 (B) 293T whole cell lysates.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.